

ABSTRACT

Distance image outputted from an image processor is read by a recognition/judgment computer, in which the distance image is divided into strips having a specified interval and a histogram is prepared for each strip. Based on the histogram, the position of solid objects and the distance thereto are obtained and these positional data of the solid objects are classified into groups of solid object and groups of side wall. Further, the position of a wall surface forming a boundary of a road is detected from the data of the groups of side wall. On the other hand, assuming a wall surface model composed of a series of nodes, respective nodes are determined and corrected by the data of side wall. Thus obtained nodes form a successive wall surface along a curved road.